

Economic Research Service

Economic Brief Number 37

July 2023

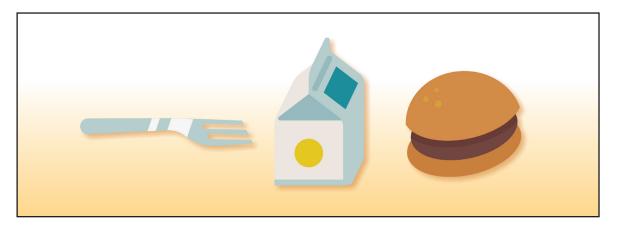
# Cost of School Meals and Households' Difficulty Paying for Expenses: Evidence From the Household Pulse Survey

Saied Toossi



#### **Recommended citation format for this publication:**

Toossi, Saied. (2023). Cost of school meals and households' difficulty paying for expenses: Evidence from the Household Pulse Survey (Report no. EB-37). U.S. Department of Agriculture, Economic Research Service.



Cover image assets sourced from Getty Images.

Use of commercial and trade names does not imply approval or constitute endorsement by USDA. The analysis, findings, and conclusions expressed in this report should not be attributed to IRI or NielsenIQ.

To ensure the quality of its research reports and satisfy governmentwide standards, ERS requires that all research reports with substantively new material be reviewed by qualified technical research peers. This technical peer review process, coordinated by ERS' Peer Review Coordinating Council, allows experts who possess the technical background, perspective, and expertise to provide an objective and meaningful assessment of the output's substantive content and clarity of communication during the publication's review.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program. intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.

Economic Research Service

Economic Brief Number 37

July 2023

# Cost of School Meals and Households' Difficulty Paying for Expenses: Evidence From the Household Pulse Survey

Saied Toossi

#### **Abstract**

School meals are typically served to children for free, at a reduced price, or at full price, depending on their household's income. In response to the Coronavirus (COVID-19) pandemic, the U.S. Department of Agriculture issued a waiver allowing schools to provide meals for free to all students regardless of household income in the 2020–21 and 2021–22 school years. This waiver expired on June 30, 2022, leading some advocates and policymakers to express concern that the reintroduction of prices for school meals could make it difficult for some households to meet their other expenses. However, it is unclear whether having to pay for school meals makes it difficult for households to meet their other spending needs. Using new data from the Household Pulse Survey, this economic brief finds that overall, nearly one-third of households with children aged 5–17 that paid for school meals in December 2022 reported that doing so made it difficult for them to pay for other usual expenses. The share reporting the same among households with children aged 5–17 and incomes below 225 percent of the Federal poverty level, and among non-White households with children aged 5–17, was higher than the overall share.

**Keywords:** National School Lunch Program; School Breakfast Program; child nutrition programs; universal free meals; financial hardship; Household Pulse Survey; COVID-19 pandemic; USDA waivers

#### **About the Author**

Saied Toossi is a research economist in USDA, Economic Research Service, Food Economics Division, Food Assistance Branch whose research focuses on child nutrition programs.

#### **Acknowledgments**

The author thanks anonymous external reviewers and reviewers at USDA, Economic Research Service (ERS) and USDA, Food and Nutrition Service (FNS). The author also thanks USDA, ERS product coordinator Debbie Rubas, editors Christine Williams, Casey Keel, Elaine Symanski, and Grant Wall, and Xan Holt of USDA, ERS for layout and design.

#### **Contents**

Introduction	1
Cost of School Meals	.2
Data	.3
Methods	.4
Findings	.5
Changes in Financial Hardship Over Time	.5
Changes in Children's Receipt of School Meals Over Time	.7
Share Reporting that Paying for School Meals Contributed to Their Financial Hardship	.9
Conclusion	.11
References	.13
Appendix	14

A report summary from the Economic Research Service

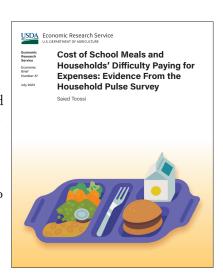
July 2023

# Cost of School Meals and Households' Difficulty Paying for Expenses: Evidence From the Household Pulse Survey

Saied Toossi

#### **Summary**

Typically, children can get school meals for free, at a reduced price, or at full price, depending on their household's income. During the Coronavirus (COVID-19) pandemic, the U.S. Department of Agriculture (USDA) issued a waiver that allowed schools to provide meals at no cost to all children, regardless of their household's income, in the 2020–21 and 2021–22 school years. These waivers expired on June 30, 2022, and many schools reverted to charging children for meals in the 2022–2023 school year. In response, some advocates and policymakers expressed concern that charging for school meals places a financial burden on families who may continue to feel the effect of the pandemic and its economic consequences, such as rising inflation. Yet, whether charging children for school meals makes it difficult for households to pay for their other expenses is unclear. This economic brief uses recently released data from the Household Pulse Survey on the experiences of households



with children aged 5–17 to provide descriptive statistics that can help add context to these discussions. Key findings include the following:

- The share of households with children aged 5–17 reporting that it was somewhat or very difficult to pay for their expenses increased from 37.7 percent (10,516,959 households) in the period from September 29 through October 11, 2021—before the waiver's expiration—to 49.1 percent (13,829,026 households) in the period from October 5 through October 17, 2022—after the waiver expired.
- In the period from September 29 through October 11, 2021, 38.5 percent of households with children aged 5–17 that had trouble paying for their expenses reported that their children received school meals. This share declined to 30.2 percent in the period from October 5 through October 17, 2022.

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

• In the period from December 7 through December 19, 2022, 31.6 percent of households with children (2,208,777 households) who paid for school meals reported that doing so made it difficult for them to pay for other usual expenses. The share reporting the same among households with children aged 5–17 and incomes below 225 percent of the Federal poverty level, and among non-White households with children aged 5–17, was higher than the overall share.	
Although these descriptive findings provide valuable context, further research is needed to establish whether—and to what extent—the cost of school meals contributes to households' financial hardship relative to other factors such as inflation or other policy changes.	

## Cost of School Meals and Households' Difficulty Paying for Expenses: Evidence From the Household Pulse Survey

#### Introduction

Schools provide nutritious meals to tens of millions of children through the National School Lunch Program (NSLP) and the School Breakfast Program (SBP). Depending on their household's income, children can get school meals for free, at a reduced price, or at full price. To mitigate hardship for families and safeguard children's access to food during the Coronavirus (COVID-19) pandemic, the U.S. Department of Agriculture (USDA) issued a waiver that allowed schools to provide meals at no cost to all children, regardless of their household's income in the 2020–2021 and 2021–2022 school years (hereafter referred to as the "free meals waiver"), among other changes that expanded the scope of the Department's child nutrition programs (Toossi, 2021; Toossi et al., 2021; Jones et al., 2022; Toossi & Jones, 2023).

These waivers expired on June 30, 2022, however, and many schools reverted to charging children for meals in the 2022–2023 school year. In response, some advocates and policymakers expressed concern that charging for school meals places a financial burden on families as they continue to struggle with the pandemic and its economic fallout, such as cost-of-living increases due to inflation (School Nutrition Association, 2022a). Others argued that charging children for school meals deters participation in these programs more generally (Food Research & Action Center, 2022). Motivated by these concerns, some States extended or permanently expanded access to free school meals, whereas other States are considering legislative proposals to do the same (School Nutrition Association, 2022b).

Yet, whether charging children for school meals contributes to households' financial hardship—defined here as difficulty paying for usual expenses—is unclear given that they are low-cost, typically no more than \$3 per meal (Murdoch et al., 2021). In a survey of parents during the 2014–15 school year, 11.4 percent of those whose children participated in NSLP responded that their children did so because the meals were inexpensive, free, or a good value. However, in the same survey, 10.7 percent of those whose children participated fewer than three times a week responded that the meals were too expensive (Fox et al., 2019). It is also unclear how households from different socioeconomic and demographic backgrounds are affected by the cost of school meals.

Understanding how many and which households report that paying for school meals contributes to their financial hardship is important as policymakers consider whether to address the issue and how to target assistance. This is particularly important as Congress begins to consider changes to school meal programs as part of new Child Nutrition Reauthorization legislation. This economic brief uses recently released data from the Household Pulse Survey (HPS) on the experiences of households with children aged 5–17 to provide timely descriptive statistics that can add context to these discussions. This study focuses on households with children aged 5–17 as this is the population eligible to receive school meals and therefore likely to be affected by the expiration of the free meals waiver. It documents changes in households' financial hardship and their children's receipt of school meals over time and presents the share of households that reported having to pay for

school meals contributed to their financial hardship after the waiver expired. This study examines differences overall as well as by household income, race, and ethnicity to identify potential disparities across households from different backgrounds.

#### **Cost of School Meals**

Most schools participate in the NSLP and SBP. In exchange for serving meals that meet specific nutrition standards and other requirements, these schools receive Federal reimbursements for each free, reduced-price, and full-price meal they serve. In addition to nutrition standards, Federal rules require that schools participating in SBP and NSLP charge no more than \$0.30 and \$0.40 cents for reduced-price breakfasts and lunches, respectively. The cost of full-price meals served through these programs is set by local school districts and can vary. In school year 2016–17, schools charged, on average, \$1.48 and \$2.57 for full-price breakfasts and lunches, respectively (Murdoch et al., 2021).

In most cases, children are eligible for free meals if their household's income is at or less than 130 percent of the Federal poverty level (FPL) or for reduced-price meals if their household's income is above 130 percent and up to 185 percent of the FPL. Otherwise, they are charged full price for meals. Children's eligibility for free or reduced-price meals is determined through an application process whereby households report their incomes or through direct certification based on their participation in select means-tested programs. Under certain conditions, children from households with incomes above 130 percent of the FPL may also receive free meals. This may be the case if, for example, they attend a school that offers meals free of charge to all children, a policy known as universal free meals (UFM).

A school, group of schools, or school district can institute UFM through several provisions included in Federal school meals legislation. The most prevalent provision is the Community Eligibility Provision of the Healthy, Hunger Free Kids Act of 2010. This provision allows a school, group of schools, or school district to provide free meals to all children if at least 40 percent are directly certified for free meals through their participation in select means-tested programs or because they are runaways, homeless, or migrants. Schools exercising this option are reimbursed at higher rates for each meal served to help cover the cost of providing meals for free to children who would otherwise have to pay. As of the 2018–19 school year, roughly one-third of all schools had adopted UFM in this way (Billings & Carter, 2020).

Alternatively, schools, school districts, or State governments can cover the cost of providing universal free breakfasts, lunches, or both, themselves. Some school districts may, for example, make breakfasts free for all students while continuing to charge some students for lunches. Others may make school meals free for all students from households with incomes below 185 percent of the FPL while continuing to charge the rest for full-price meals (e.g., Schwartz & Rothbart, 2020). Several States have also expanded access to free meals in response to the expiration of USDA's free meals waiver. As of March 2023, four states (Connecticut, Massachusetts, Nevada, and Vermont) opted to subsidize the provision of free school meals to all children statewide for the 2022–2023 school year, while five (California, Colorado, Maine, Minnesota, and New Mexico) elected to do so on a permanent basis (School Nutrition Association, 2022b; 2023). Other States

<sup>&</sup>lt;sup>1</sup> In some schools, students are directly certified for free meals if their household participates in the Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families, Medicaid, or the Food Distribution Program on Indian Reservations.

made school breakfasts free for all children in the 2022–2023 school year (Pennsylvania) or expanded the household income threshold for free meal eligibility to 200 percent of the FPL (New Jersey).<sup>2</sup>

As a result of these policies, some children from higher income households may receive one meal (e.g., breakfast but not lunch) or both meals (breakfast and lunch) for free. Additionally, since many schools require households to report their income via an application process (e.g., non-UFM schools)—and because not all households do so and/or because of errors made when completing or processing applications (Rosen et al., 2022)—some children from lower income households pay for meals that they otherwise would receive for free. In fact, most school meals are served for free or at full price. In Federal fiscal year 2019 (October 1, 2018, through September 30, 2019), the year before the onset of the COVID-19 pandemic, about 29.6 million and 14.8 million children participated in NSLP and SBP each school day, respectively. Among those participating in NSLP, 68.0 percent received lunches for free, 5.8 percent paid a reduced price, and 26.2 percent paid full price. Among the students participating in SBP, 79.9 percent received breakfasts for free, 5.0 percent paid a reduced price, and 15.1 percent paid full price (USDA, Food and Nutrition Service, 2021).

For budget-constrained households with children who do not receive free meals, the cost of school meals may become significant over the course of a school year. For example, in the 2016–17 school year, the total cost for full-price lunches and breakfasts for a household with two school-aged children could have amounted to \$162 per school month or \$1,458 per school year.<sup>3</sup> Comparatively, average monthly household expenditures on electricity amounted to \$122 in 2021 (Gorski, 2022). Taking into consideration other household expenditures (e.g., food purchased outside of NSLP and SBP, utilities, rent or mortgage, and/or car payments), paying for school meals may therefore affect a household's ability to cover all its spending needs.

USDA's free meals waiver may have made it easier for some households to pay for their expenses as the money they would have otherwise spent on their children's school meals could be allocated toward other needs. With the expiration of the waiver on June 30, 2022, the child nutrition programs reverted to operating under their original rules and guidelines—including the three-tiered pricing structure for school meals (absent other local or State policies), thereby potentially contributing to the financial hardship of some households at a time when inflation was contributing to increases in the cost of living.

#### Data

This study used publicly available data from the Household Pulse Survey (HPS), which was developed by the U.S. Department of Commerce, Bureau of the Census in conjunction with USDA and other Federal agencies, to provide near real-time information on the experiences of households during the COVID-19 pandemic (U.S. Department of Commerce, Bureau of the Census, 2022). The HPS was fielded on a weekly basis from April 2020 through July 2020 and a biweekly basis from August 2020 through September 2021. From October 2021 to present, it was fielded over about a 2-week period roughly every other 2 weeks. The survey periods are referred to as "weeks." For example, HPS week 1 covered April 23 through May 5, 2020. The contents of the HPS were also subject to change over time as circumstances evolved during the pandemic.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> In Pennsylvania, the State covered the cost of providing free breakfasts using funding that was previously appropriated. In New Jersey, free meal eligibility was expanded through the Working-Class Families' Anti-Hunger Act.

<sup>&</sup>lt;sup>3</sup> In school year 2016–17, schools charged on average \$1.48 and \$2.57 for full-price breakfasts and lunches, respectively (Murdoch et al., 2021). Per month calculation assumes 20 school days in a month during the school year. Per year calculation assumes 180 school days in a school year.

<sup>&</sup>lt;sup>4</sup> Greater detail on the Household Pulse Survey is available on the U.S. Department of Commerce, Bureau of the Census webpage "Measuring Household Experiences During the Coronavirus Pandemic."

This study used data from HPS weeks 39 and 50 (corresponding to the periods September 29 through October 11, 2021, and October 5 through October 17, 2022, respectively) to account for seasonality in household experiences of financial hardship and children's receipt of food assistance. The study also used HPS week 52 (corresponding to the period December 7 through December 19, 2022) to leverage new data on the receipt of school meals and their contribution to households' financial hardship. Each of these surveys included information on respondents' State, race, and ethnicity as well as household composition and income bracket (e.g., less than \$25,000 or between \$25,000 and \$34,999) in the previous year (i.e., income in 2020 if surveyed in 2021, and income in 2021 if surveyed in 2022). Additionally, respondents were consistently asked how difficult it had been for their household to pay for their usual expenses (e.g., food, rent or mortgage, car payments, medical expenses, student loans) in the last 7 days. Respondents could select from the following mutually exclusive response options: "not at all difficult;" "a little difficult;" "somewhat difficult;" or "very difficult."

Respondents in households with children were also asked where and/or how their children received food assistance, if any, in HPS weeks 39, 50, and 52, though not in the same way in each week. In weeks 39 and 50, response options for the latter question included "eat meals onsite, at school or other location" alongside five other options (e.g., meal delivery or pick-up). Beginning with week 52, the set of response options to the question was expanded to reflect changes to the food assistance available to children after the expiration of USDA waivers. The new response options included "receive free meals at school," "pay for reduced-price meals at school," and "pay full price for meals at school," in addition to "eat free meals at a location other than school" and four others (e.g., meal delivery or pick-up, or none of the above). Respondents could select multiple response options in each of the week 39, 50, and 52 iterations. The week 52 iteration of HPS also included a new question. Respondents selecting that their household's children paid for reduced- or full-price school meals, or did not receive school meals or other food assistance (i.e., those selecting "none of the above"), were also asked a follow-up question about whether having to pay for the food their children ate at school made it difficult for them to pay for their other household expenses.<sup>6</sup>

#### **Methods**

To examine changes in financial hardship and receipt of food assistance over time, the share of households with children aged 5–17 reporting difficulty paying for their household expenses in the last 7 days and their children's receipt of school meals was compared across HPS week 39 (September 29 through October 11, 2021)—before the waiver for free meals expired—and HPS week 50 (October 5 through October 17, 2022)—after the waiver expired. Choosing these two HPS weeks, which were conducted at about the same time across 2021 and 2022, helps to account for seasonality in reports of difficulty meeting spending needs or use of food assistance programs. Next, using data from HPS week 52 (December 7 through December 19, 2022), the share reporting that paying for school meals made it difficult to pay for other expenses in the period after the waiver expired was examined. In each case, the analyses were conducted by household income, race, and ethnicity. All analyses used HPS household weights to produce nationally representa-

<sup>&</sup>lt;sup>5</sup> HPS weeks 39 and 50 were the only two that were conducted at approximately the same time of year in 2021 and 2022.

<sup>&</sup>lt;sup>6</sup> The precise wording of the survey questions used in this study and their associated response options are available in appendix table A1.

tive estimates for households, together with Fay's method for balanced repeated replications to compute 95-percent confidence intervals.<sup>7</sup>

Households were categorized as either White, Black, or Another (Asian, another race, or a combination of races), or Hispanic or non-Hispanic, using information on respondents' race and ethnicity. Households with children aged 5–17 were identified using the information on household composition. To approximate each household's income-to-poverty ratio, each respondent's household was assigned the midpoint of the income bracket they specified, and these values were divided by the Federal poverty threshold corresponding to their household size and multiplied by 100.8 These income-to-poverty ratios were used to group households into four categories. The first two categories correspond to the eligibility requirements for free and reduced-price school meals. Although all children from households with incomes greater than 185 percent of the FPL are charged full price for school meals absent other local or State policies, households with income-to-poverty ratios just above the threshold may face different financial hardship than those further above the threshold, particularly in higher cost-of-living areas. As such, categories were also created for households with incomes greater than 185 percent to 225 percent of the FPL, and greater than 225 percent of the FPL.9

Households were categorized as having financial hardship if respondents answered that their household found it "somewhat" or "very" difficult to pay for their usual expenses in the last 7 days. This was done to capture a more severe experience of difficulty as compared with having no or "a little" difficulty. Households were also categorized by respondent reports of whether children received meals onsite at a school or other location. This response may overestimate the share of households whose children received school meals but likely serves as a reasonable proxy since HPS weeks 39 and 50 collected data during the school year when most meals are obtained at schools. Lastly, households reporting that their children paid for reduced- or full-price school meals were categorized by their response to the prompt asking whether paying for the food their children ate at school made it difficult to pay for their other expenses.

#### **Findings**

#### Changes in Financial Hardship Over Time

Figure 1 presents the share of households with children aged 5–17 reporting that it was "somewhat" or "very difficult" to pay for their expenses in the last 7 days across the periods September 29 through October 11, 2021, and October 5 through October 17, 2022. Overall, 37.7 percent of all households reported difficulty paying for their expenses in the period September 29 through October 11, 2021. The share reporting the same among households with incomes below 225 percent of the FPL, and Black and Hispanic households,

<sup>&</sup>lt;sup>7</sup> The analysis was also conducted using the sample of respondents in States that had not adopted UFM statewide by December 2022. This sample excludes respondents in California, Maine, Massachusetts, Nevada, and Vermont. Colorado approved statewide UFM by referendum in November 2022, and the policy is being phased in over time as school districts opt into providing free meals to all students; Connecticut adopted statewide UFM for the 2022–2023 school year in February 2023 after previous legislation extending UFM through November 2022 had expired; and Minnesota and New Mexico adopted statewide UFM in March 2023. The results were similar and are presented in appendix tables A3–A5.

<sup>&</sup>lt;sup>8</sup> This study accounted for the higher Federal poverty thresholds in Alaska and Hawaii. The Federal poverty guidelines for 2020 and 2021 for the contiguous United States, Alaska, and Hawaii are available in table A2 for reference.

<sup>&</sup>lt;sup>9</sup> The category 185 percent to 225 percent of the FPL was selected to capture households just above the threshold for reduced-price school meals that may be particularly in need. For a household of four living in the contiguous United States, the category corresponds to incomes between \$48,470 and \$58,950 in 2020 and between \$49,025 and \$59,625 in 2021. These upper limits are about \$10,000 lower than the median household income in the United States. As a robustness check, the analysis was also conducted using income-to-poverty ratios of greater than 185 percent to 250 percent of the FPL and greater than 250 percent of the FPL, bringing the upper-income limits for a household of four in the contiguous United States and in the former category to just under the national median. Results were qualitatively similar and are available upon request.

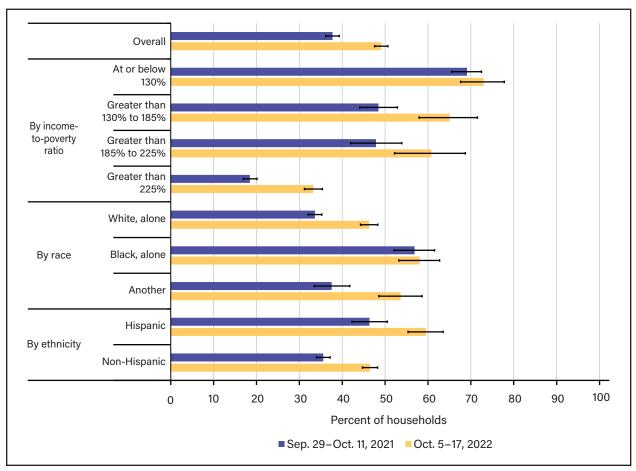
was statistically distinguishable from and higher than the overall share and was greatest among those in the lowest income-to-poverty ratio category and Black households, at 69.1 percent and 56.9 percent, respectively. Greater shares of non-White households reported trouble paying for their expenses relative to their White counterparts, as did Hispanic households relative to non-Hispanic households and lower-income households relative to higher-income households.

By October 5 through October 17, 2022, these shares had increased for households overall and by type, except for those with incomes below 130 percent of the FPL and Black households, for whom differences were not statistically significant. Among these households, large majorities continued to report having difficulty paying for their expenses. For other households, increases ranged from 10.9 percentage points among non-Hispanic households to 16.6 percentage points among households with incomes greater than 130 percent and up to 185 percent of the FPL. Similar to the 2021 period, households in the lower income-to-poverty ratio categories reported having trouble paying for their expenses at higher shares than those in the highest, as did non-White households relative to White households and Hispanic households relative to non-Hispanic households.

Changes in household reports across the two periods could be due to several factors including rising inflation in 2022 which increased the costs of many essential goods and services. Between October 2021 and October 2022, the Consumer Price Index (a measure of the average change over time in the prices paid by urban consumers for goods and services) rose by 7.7 percent (U.S. Department of Labor, Bureau of Labor Statistics, 2022). Another contributor could be the expiration of the USDA's free meals waiver, which may have added to the expenses of households whose children rely on school meals, and/or changes to other policies and assistance programs. <sup>10</sup>

<sup>&</sup>lt;sup>10</sup> These include, for example, the end of the expanded child tax credit and the phasing out of the USDA Supplemental Nutrition Assistance Program emergency allotments between October 2021 and October 2022, which may have affected household budgets.

Figure 1
Share reporting difficulty paying for expenses in the last 7 days among households with children aged 5-17



Note: Samples of households with children aged 5–17 from Household Pulse Survey (HPS) weeks 39 (September 29 through October 11, 2021) and 50 (October 5 through October 17, 2022). Table presents the share reporting that it was "somewhat" or "very" difficult to pay for their household expenses in the last 7 days overall and by income-to-poverty ratio, race, and ethnicity. Income-to-poverty ratios in HPS weeks 39 and 50 based on household income in 2020 and 2021, respectively. Black bars represent 95-percent confidence intervals. The estimates and confidence intervals are presented in appendix table A3 alongside the unweighted sample size in each stratum and corresponding weighted population estimate. Appendix tables A6 and A7 present the differences between estimates within categories by HPS week and differences between estimates across HPS weeks by category and their corresponding *t*-statistics and *p*-values, respectively.

Source: USDA, Economic Research Service using Department of Commerce, Bureau of the Census, Household Pulse Survey data.

#### Changes in Children's Receipt of School Meals Over Time

For the expiration of the free meals waiver to contribute to increases in financial hardship, children must have received school meals. Figure 2 presents the share of households with children aged 5–17 that reported their children received meals onsite at a school (or other location) among those that reported it was "somewhat" or "very" difficult to pay for their expenses. Shares are shown across the periods September 29 through October 11, 2021—before the free meals waiver expired—and October 5 through October 17, 2022—afterward. In the period before the free meals waiver expired, 38.5 percent of all households reported that their children received school meals. The share was statistically distinguishable from and higher than the overall share for households with incomes at or below 130 percent of the FPL (43.0 percent), greater than 130 percent to 185 percent of the FPL (48.3 percent), and greater than 185 percent to 225 percent of the FPL (55.7 percent). A

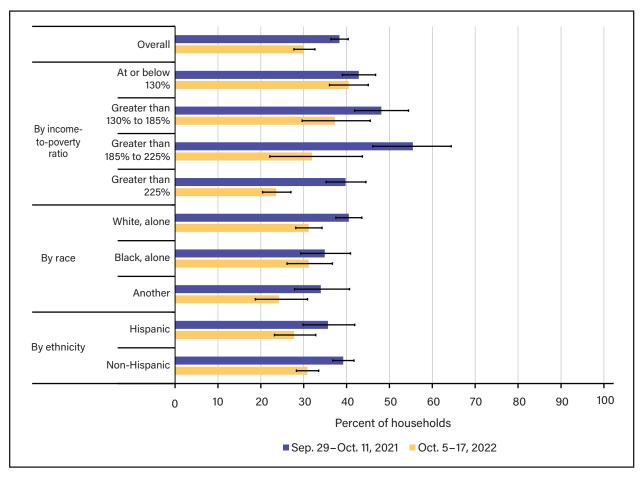
comparatively greater share of households in the latter group may have depended on school meals during this period since their incomes typically make them ineligible for other food and nutrition assistance programs.<sup>11</sup>

The overall share that reported their children received school meals was 30.2 percent in the period after the free meals waiver expired, a statistically significant decrease of 8.3 percentage points. There were also statistically significant declines among White and non-White, non-Black households, Hispanic and non-Hispanic households, and households with incomes greater than 185 percent of the FPL, whose children would typically not be eligible for free or reduced-price meals. Among the latter group, the decrease was 23.6 percentage points among households just above the free or reduced-price meal eligibility threshold and 16.3 percentage points among those with incomes greater than 225 percent of the FPL. There were no statistically significant differences in the shares for households with incomes below 185 percent of the FPL, whose children were still eligible to receive free or reduced-price school meals.

There may be several reasons for the decline in reports of children receiving school meals after the free meals waiver's expiration among households experiencing difficulty paying for their expenses. For example, paying full price for school meals may have been cost prohibitive for some households. Alternatively, school meals may not have been perceived to be a good value relative to their cost by some households after prices were reintroduced. Nevertheless, considerable shares of households with children aged 5–17 that reported difficulty paying their expenses continued to report that their children received school meals in the 2022–2023 school year.

<sup>&</sup>lt;sup>11</sup> For example, income eligibility for USDA's Supplemental Nutrition Assistance Program—the largest Federal food and nutrition assistance program—varies across States and is no more than 200 percent of the FPL.

Figure 2
Share reporting receipt of school meals among households with children aged 5-17 that reported difficulty paying for their expenses



Note: Samples of households with children aged 5–17 that reported that it was "somewhat" or "very" difficult paying for their expenses in the last 7 days from Household Pulse Survey weeks 39 (September 29 through October 11, 2021) and 50 (October 5 through October 17, 2022). Table presents the share reporting receipt of meals onsite at a school or other location overall and by income-to-poverty ratio, race, and ethnicity. Income-to-poverty ratios in HPS weeks 39 and 50 based on household income in 2020 and 2021, respectively. Black bars represent 95-percent confidence intervals. The estimates and confidence intervals are also presented in appendix table A4 alongside the unweighted sample size in each stratum and corresponding weighted population estimate. Appendix tables A6 and A7 present the differences between estimates within categories by HPS week and differences between estimates across HPS weeks by category and their corresponding *t*-statistics and *p*-values, respectively.

Source: USDA, Economic Research Service using Department of Commerce, Bureau of the Census, Household Pulse Survey data.

### Share Reporting that Paying for School Meals Contributed to Their Financial Hardship

Many households continued receiving school meals after the free meals waiver had expired and, for those having to pay for them, doing so may have contributed to their financial hardship. Figure 3 presents the share of households with children aged 5–17 who reported that paying for school meals made it difficult to pay for other expenses among those that reported paying for their children's school meals (at reduced or full prices).

The share is shown for the period December 7 through December 19, 2022. Overall, 31.6 percent of households that paid for school meals reported that doing so made it difficult to pay for their other expenses.<sup>12</sup>

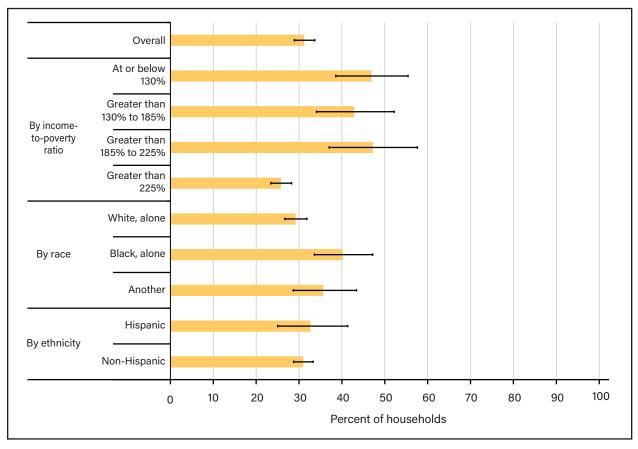
Among households with incomes below 225 percent of the FPL, about equal shares reported that paying for school meals made it difficult to pay for their other expenses. These shares were 47.5 percent, 43.4 percent, and 47.8 percent among households with incomes at or below 130 percent of the FPL, greater than 130 percent to 185 percent of the FPL, and greater than 185 percent to 225 percent of the FPL, respectively. The share was 26.1 percent among households in the highest income-to-poverty ratio category, a statistically significant difference of between 17.3 and 21.7 percentage points relative to households in lower income-to-poverty ratio categories. Disparities in the share reporting that paying for school meals contributed to financial hardship also existed across households by race. The share was highest for Black households, 40.7 percent, and lowest for White households, 29.6 percent—a statistically significant difference.

There are at least two reasons why households with incomes below 130 percent of the FPL and eligible for free school meals may report having to pay for them. First, there may be a discrepancy between households' incomes in 2022, when respondents were surveyed, and 2021—the calendar year for which respondents were asked to report their household's income. Second, as discussed above, absent other local or State policies, failure to apply for free school meals or errors made in the certification process can result in children otherwise eligible for free meals having to pay for them. For the same reasons, the shares expressing that having to pay for school meals made it difficult to pay for their other expenses may have been similar for households with incomes below 130 percent of the FPL and above 130 percent to 225 percent of the FPL. In addition to changes in household income over time, having to pay for school meals may pose a greater financial burden on the lowest income households whose children are not certified for free meals, while expanded access to free meals in some locales and States may help to alleviate the financial burden for slightly higher income households whose children would otherwise have to pay.

<sup>&</sup>lt;sup>12</sup> Many households celebrate various holidays in the month of December and expend financial and other resources in preparation for these celebrations. As such, this estimate may be higher than in other months.

Figure 3

Share reporting that paying for school meals made it difficult to pay for other expenses among households with children aged 5-17 that reported paying for school meals



Note: Sample of households with children aged 5–17 that reported paying for reduced- or full-price school meals from Household Pulse Survey week 52 (December 7 through December 19, 2022). Table presents the share of households reporting that having to pay for school meals contributed to difficulty paying for their other expenses overall and by income-to-poverty ratio, race, and ethnicity. Income-to-poverty ratios based on household income in 2021. Black bars represent 95-percent confidence intervals. The estimates and confidence intervals are also presented in appendix table A5 alongside the unweighted sample size in each stratum and corresponding weighted population estimate. Appendix table A6 present the differences between estimates within categories and their corresponding *t*-statistics and *p*-values.

Source: USDA, Economic Research Service using Department of Commerce, Bureau of the Census, Household Pulse Survey data.

#### Conclusion

School meals are typically served to children for free, at a reduced price, or at full price, depending on their household's income. In response to the COVID-19 pandemic, USDA issued a waiver allowing schools to provide meals for free to all students regardless of household income in the 2020–21 and 2021–22 school years. This waiver expired on June 30, 2022, leading some to express concern that the reintroduction of prices for school meals could make it difficult for some households to pay for their expenses. However, given the relatively low cost of school meals, it is unclear whether—and for whom—having to pay for school meals contributes to households' financial hardship.

Using new data from the HPS, this economic brief presents the first insights about the relationship between the cost of school meals and households' financial hardship during the 2022–2023 school year and after the

expiration of USDA's free meals waiver. Overall, 31.6 percent of households with children aged 5–17 that paid for school meals reported that doing so made it difficult for them to pay for other usual expenses. The share reporting the same among households with incomes below 225 percent of the FPL and non-White households was higher than the overall share. These findings can inform ongoing discussions about the impact of USDA's free meals waiver expiration on households and legislative proposals to expand access to free meals.

However, it is important to note several limitations of this study. First, the results presented are descriptive and do not establish any causal relationships. Second, it is unclear how unique or significant of a contributor school meals were to households' financial hardship relative to other expenses (e.g., groceries, utilities, rent, or car payments), especially in the context of rising inflation in 2022. Further research is needed to determine whether and to what extent the cost of school meals contributes to households' financial hardship relative to other factors. Third, absent the availability of similar data pre-pandemic, it is unknown whether the share reporting that paying for school meals contributed to their financial hardship in the 2022–2023 school year is less than, greater than, or about the same as in a typical school year.

#### References

- Billings, K.C., & Carter, J.A. (2020). Serving free school meals through the Community Eligibility Provision (CEP): Background and participation. Congressional Research Service. R46371
- Food Research & Action Center. (2022). FRAC applauds lawmakers for support of free school meals for all, calls for waivers to be extended SY 2022–2023.
- Fox, M. K., Gearan, E., Cabili, C., Dotter, D., Niland, K., Washburn, L., & Paxton, N. (2019). School nutrition and meal cost study, final report volume 4: Student participation, satisfaction, plate waste, and dietary intakes. U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support.
- Gorski, A. (2022). U.S. residential electricity expenditures increased by \$5 per month in 2021. U.S. Department of Energy, Energy Information Administration.
- Jones, J. W., Toossi, S., & Hodges, L. (2022). *The food and nutrition assistance landscape: Fiscal year 2021 annual report*. U.S. Department of Agriculture, Economic Research Service. EIB–237.
- Murdoch, J., Garasky, S., Ullrich, S., Chakravorty, A., Beyler, N., Cabili, C., Zeidman, E., Chelminsky, D., and Kimathi, M. (2021). *Child nutrition program operations study*. U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support. (CN-OPS-II): SY 2016–17.
- Rosen, R. M., Taylor, J., Baier, K., & May, L. (2022). Ensuring proper benefits for students in school meal programs. *Journal of Child Nutrition & Management*, 46(2), 1–15.
- School Nutrition Association. (2022a). SNA welcomes Healthy Meals, Healthy Kids Act.
- School Nutrition Association. (2022b). 2022 third quarter state legislative report.
- School Nutrition Association. (2023). 2023 first quarter state legislative report.
- Schwartz, A. E., & Rothbart, M. W. (2020). Let them eat lunch: The impact of universal free meals on student performance. *Journal of Policy Analysis and Management*, 39(2), 376–410.
- Toossi, S. (2021). COVID-19 working paper: Filling the pandemic meal gap: Disruptions to child nutrition programs and expansion of free meal sites in the early months of the pandemic. U.S. Department of Agriculture, Economic Research Service. AP–093.
- Toossi, S., and Jones, J.W. (2023). *The food and nutrition assistance landscape: Fiscal year 2022 annual report.* U.S. Department of Agriculture, Economic Research Service. EIB-255.
- Toossi, S., Jones, J. W., & Hodges, L. (2021). *The food and nutrition assistance landscape: Fiscal year 2020 annual report*. U.S. Department of Agriculture, Economic Research Service. EIB-227.
- U.S. Department of Agriculture, Food and Nutrition Service. (2021). September 2020 Keydata report.
- U.S Department of Agriculture, Food and Nutrition Service. (2022). State guidance on coronavirus P-EBT.
- U.S. Department of Commerce, Bureau of the Census. (2022). Household pulse survey: Measuring household experiences during the coronavirus pandemic.
- U.S. Department of Health and Human Services, Office of the Assistance Secretary for Planning and Evaluation. (2022). *Poverty Guidelines*.
- U.S. Department of Labor, Bureau of Labor Statistics. (2022). *The economics daily: Consumer prices up 7.7 percent over year ended October 2022.*

#### **Appendix**

Table A1 **Household Pulse Survey questions and response options** 

Weeks 39, 50, and 52				
Question		Response options		
In 2021 what was your total household income before taxes? Select only one answer.		(1) Less than \$25,000 (2) \$25,000-\$34,999 (3) \$35,000-\$49,999 (4) \$50,000-\$74,999 (5) \$75,000-\$99,999 (6) \$100,000-\$149,999 (7) \$150,000-\$199,999 (8) \$200,000 and above		
What is your race? Plea	ase select all that apply.	<ul><li>(1) White, alone</li><li>(2) Black, alone</li><li>(3) Asian, alone</li><li>(4) Any other race alor</li></ul>	ne, or race in combination	
Are you of Hispanic, La	ntino, or Spanish origin?		, Latino, or Spanish origin atino, or Spanish origin	
In the last 7 days, how difficult has it been for your household to pay for usual household expenses, including but not limited to food, rent or mortgage, car payments, medical expenses, student loans, and so on? Select only one answer.		(1) Not at all difficult (2) A little difficult (3) Somewhat difficult (4) Very difficult		
We	eeks 39 and 50		Week 52	
Question	Response options	Question	Response options	
1) Pick up meals at a school or other location (2) Receive an EBT card to help buy groceries (3) Eat meals onsite, at school or other location (4) Have meals delivered (5) Children did not receive free meals or food assistance		Did the student(s) (select all that apply)	<ol> <li>(1) Receive free meals at school</li> <li>(2) Pay for reduced-price meals at school</li> <li>(3) Pay full-price for meals at school</li> <li>(4) Pick up free meals at a school or other location</li> <li>(5) Receive an EBT card to help buy groceries</li> <li>(6) Eat free meals at a location other than school</li> <li>(7) Have free meals delivered</li> <li>(8) None of the above</li> </ol>	
Week 52				
	Question	Response options		
Does having to pay for the food children eat at school make it difficult for your household to pay for other expenses?		(1) Yes (2) No		

Table A2
Federal poverty guidelines by household size and year

2020			2021		
Household size	Poverty guideline	Household size	Poverty guideline		
	Contiguous United States				
1	\$12,760	1	\$12,880		
2	\$17,240	2	\$17,420		
3	\$21,720	3	\$21,960		
4	\$26,200	4	\$26,500		
5	\$30,680	5	\$31,040		
6	\$35,160	6	\$35,580		
7	\$39,640	7	\$40,120		
8	\$44,120	8	\$44,660		
9 or more	Add \$4,480 for each additional person	9 or more	Add \$4,540 for each additional person		
	Ala	ska			
1	\$15,950	1	\$16,090		
2	\$21,550	2	\$21,770		
3	\$27,150	3	\$27,450		
4	\$32,750	4	\$33,130		
5	\$38,350	5	\$38,810		
6	\$43,950	6	\$44,490		
7	\$49,550	7	\$50,170		
8	\$55,150	8	\$55,850		
9 or more	Add \$5,600 for each additional person	9 or more	Add \$5,680 for each additional person		
	Hawaii				
1	\$14,680	1	\$14,820		
2	\$19,830	2	\$20,040		
3	\$24,980	3	\$25,260		
4	\$30,130	4	\$30,480		
5	\$35,280	5	\$35,700		
6	\$40,430	6	\$40,920		
7	\$45,580	7	\$46,140		
8	\$50,730	8	\$51,360		
9 or more	Add \$5,150 for each additional person	9 or more	Add \$5,220 for each additional person		

Source: USDA, Economic Research Service using U.S. Department of Health and Human Services, Office of the Assistance Secretary for Planning and Evaluation, Poverty Guidelines.

Table A3

Share reporting difficulty paying for expenses in the last 7 days among households with children aged 5-17

	All States		Non-UFM States		
	HPS week 39	HPS week 50	HPS week 39	HPS week 50	
Overall	37.72	49.08	37.76	48.25	
	(36.18, 39.30)	(47.53, 50.64)	(36.10, 39.45)	(46.73, 49.77)	
	[12,572]	[8,882]	[10,809]	[7,859]	
	{10,516,959}	{13,829,026}	{8,960,152}	{11,478,701}	
By income-to-pove	erty ratio				
Less than or equal to 130 per- cent of FPL	69.11 (65.53, 72.48) [1,573] {3,876,754}	72.99 (67.60, 77.77) [1,132] {3,962,784}	69.16 (65.51, 72.59) [1,375] {3,233,888}	73.34 (68.14, 77.97) [1,012] {3,319,712}	
Greater than 130	48.46	65.04	47.61	64.50	
percent and up	(44.08, 52.87)	(57.93, 71.53)	(42.75, 52.51)	(57.37, 71.03)	
to 185 percent of	[969]	[689]	[839]	[629]	
FPL	{1,266,716}	{1,814,156}	{1,093,362}	{1,507,158}	
Greater than 185	47.87	60.76	47.11	57.20	
percent and up	(41.92, 53.88)	(52.20, 68.70)	(40.72, 53.58)	(48.57, 65.41)	
to 225 percent of	[573]	[450]	[507]	[404]	
FPL	{562,119}	{854,148}	{472,911}	{662,812}	
Greater than 225 percent of FPL	18.46	33.25	18.80	32.56	
	(16.91, 20.12)	(31.17, 35.39)	(17.09, 20.63)	(30.33, 34.87)	
	[7,309]	[5,163]	[6,231]	[4,555]	
	{2,310,708}	{4,175,738}	{1,999,643}	{3,530,950}	
By race					
White	33.64	46.27	33.03	44.90	
	(32.08, 35.24)	(44.27, 48.28)	(31.37, 34.74)	(42.88, 46.94)	
	[9,779]	[7,096]	[8,475]	[6,322]	
	{6,675,670}	{9,233,496}	{5,615,331}	{7,630,746}	
Black	56.88	58.04	56.50	57.34	
	(52.11, 61.53)	(53.21, 62.72)	(51.56, 61.31)	(52.47, 62.08)	
	[1,211]	[776]	[1,105]	[702]	
	{2,425,507}	{2,477,705}	{2,261,407}	{2,224,396}	
Another	37.54	53.60	39.70	55.66	
	(33.49, 41.78)	(48.53, 58.61)	(35.16, 44.43)	(49.96, 61.21)	
	[1,582]	[1,010]	[1,229]	[835]	
	{1,415,782}	{2,117,826}	{1,083,415}	{1,623,559}	
By ethnicity					
Hispanic	46.36	59.50	45.42	58.91	
	(42.27, 50.51)	(55.33, 63.54)	(40.75, 50.17)	(53.48, 64.14)	
	[1,549]	[1,007]	[1,168]	[789]	
	{2,567,995}	{3,340,204}	{1,804,904}	{2,373,645}	
Non-Hispanic	35.58	46.49	36.21	46.07	
	(34.01, 37.19)	(44.72, 48.27)	(34.59, 37.88)	(44.39, 47.76)	
	[11,023]	[7,875]	[9,641]	[7,070]	
	{7,948,964}	{10,488,823}	{7,155,249}	{9,105,055}	

HPS = Household Pulse Survey. FPL = Federal poverty level. UFM = Universal free meals. Another = Asian, another race, or a combination of races.

Note: Table presents the statistics underlying figure 1 in the main text by sample and Household Pulse Survey week (weeks 39 and 50). The "All States" sample includes respondents in all States. The "Non-UFM States" sample excludes States that had adopted universal free meals (UFM) statewide for the 2022–2023 school year (California, Maine, Massachusetts, Nevada, and Vermont). From top to bottom, each cell presents the sample estimate, the estimated 95-percent confidence interval (in parenthesis), the unweighted sample size (in brackets), and the samples corresponding weighted population estimate (in braces).

Table A4

Share reporting receipt of school meals among households with children aged 5-17 that reported difficulty paying for their expenses

	All States		Non-UFM States		
	HPS week 39	HPS week 50	HPS week 39	HPS week 50	
Overall	38.50	30.23	38.38	29.13	
	(36.49, 40.55)	(27.82, 32.75)	(36.41, 40.39)	(26.95, 31.42)	
	[3,528]	[3,656]	[3,054]	[3,238]	
	{4,048,687}	{4,180,667}	{3,439,215}	{3,344,182}	
By income-to-pove	erty ratio				
Less than or equal to 130 per- cent of FPL	43.03 (39.19, 46.95) [1,011] {1,668,055}	40.64 (36.18, 45.26) [843] {1,610,429}	41.90 (37.86, 46.06) [884] {1,355,139}	40.58 (36.61, 44.68) [756] {1,347,184}	
Greater than 130	48.30	37.40	50.25	38.87	
percent and up	(42.02, 54.64)	(29.76, 45.71)	(43.58, 56.92)	(31.14, 47.20)	
to 185 percent of	[462]	[437]	[394]	[396]	
FPL	{611,847}	{678,415}	{549,441}	{585,838}	
Greater than 185	55.67	32.08	53.24	32.54	
percent and up	(46.31, 64.65)	(22.20, 43.88)	(43.00, 63.21)	(22.65, 44.27)	
to 225 percent of	[236]	[255]	[209]	[226]	
FPL	{312,931}	{274,040}	{251,769}	{215,669}	
Greater than 225 percent of FPL	39.94	23.67	40.96	21.06	
	(35.38, 44.69)	(20.51, 27.15)	(36.16, 45.95)	(17.62, 24.97)	
	[1,098]	[1,476]	[940]	[1,300]	
	{922,985}	{988,521}	{819,107}	{743,572}	
By race					
White	40.68	31.28	41.50	30.43	
	(37.69, 43.74)	(28.28, 34.44)	(38.53, 44.54)	(27.66, 33.35)	
	[2,432]	[2,773]	[2,097]	[2,467]	
	{2,715,611}	{2,888,029}	{2,330,612}	{2,322,039}	
Black	35.04	31.31	33.31	30.02	
	(29.43, 41.09)	(26.25, 36.85)	(27.56, 39.60)	(24.93, 35.66)	
	[590]	[441]	[544]	[398]	
	{849,795}	{775,700}	{753,244}	{667,721}	
Another	34.14	24.41	32.80	21.83	
	(27.99, 40.86)	(18.81, 31.03)	(25.86, 40.58)	(16.27, 28.63)	
	[506]	[442]	[413]	[373]	
	{483,281}	{516,938}	{355,359}	{354,422}	
By ethnicity					
Hispanic	35.79	27.87	33.90	25.03	
	(29.96, 42.08)	(23.30, 32.95)	(27.68, 40.73)	(20.33, 30.40)	
	[621]	[538]	[461]	[420]	
	{919,088}	{930,873}	{611,903}	{594,090}	
Non-Hispanic	39.37	30.98	39.51	30.20	
	(36.91, 41.89)	(28.45, 33.64)	(37.02, 42.07)	(27.78, 32.74)	
	[2,907]	[3,118]	[2,593]	[2,818]	
	{3,129,598}	{3,249,794}	{2,827,312}	{2,750,092}	

HPS = Household Pulse Survey. FPL = Federal poverty level. UFM = Universal free meals. Another = Asian, another race, or a combination of races.

Note: Table presents the statistics underlying figure 2 in the main text by sample and Household Pulse Survey week (weeks 39 and 50). The "All States" sample includes respondents in all States. The "Non-UFM States" sample excludes States that had adopted universal free meals (UFM) statewide for the 2022–2023 school year (California, Maine, Massachusetts, Nevada, and Vermont). From top to bottom, each cell presents the sample estimate, the estimated 95-percent confidence interval (in parenthesis), the unweighted sample size (in brackets), and the samples corresponding weighted population estimate (in braces).

Table A5

Share reporting that paying for school meals made it difficult to pay for other expenses among households with children aged 5-17 that reported paying for school meals

	All States	Non-UFM States
	HPS week 52	HPS week 52
Overall	31.63 (29.27, 34.09) [4,844] {2,208,777}	32.24 (29.82, 34.75) [4,653] {2,118,832}
By income-to-poverty ratio		
Less than or equal to 130 percent of FPL	47.45 (39.01, 56.04) [248] {296,369}	48.91 (40.10, 57.79) [235] {278,557}
Greater than 130 percent and up to 185 percent of FPL	43.41 (34.47, 52.79) [332] {255,642}	48.02 (38.55, 57.63) [319] {250,170}
Greater than 185 percent and up to 225 percent of FPL	47.76 (37.48, 58.24) [254] {189,207}	47.58 (36.95, 58.44) [246] {180,198}
Greater than 225 percent of FPL	26.11 (23.73, 28.65) [3,547] {1,186,747}	26.61 (24.14, 29.25) [3,415] {1,152,786}
By race		
White	29.58 (27.04, 32.26) [4,016] {1,594,161}	30.03 (27.40, 32.80) [3,884] {1,543,784}
Black	40.67 (33.98, 47.72) [360] {343,853}	42.58 (35.85, 49.60) [344] {337,279}
Another	36.14 (29.03, 43.91) [468] {270,762}	37.19 (30.10, 44.87) [425] {237,769}
By ethnicity		
Hispanic	33.08 (25.36, 41.84) [414] {364,601}	33.04 (24.59, 42.75) [374] {311,095}
Non-Hispanic	31.36 (29.11, 33.69) [4,430] {1,844,176}	32.10 (29.77, 34.53) [4,279] {1,807,737}

HPS = Household Pulse Survey. FPL = Federal poverty level. UFM = Universal free meals. Another = Asian, another race, or a combination of races.

Note: Table presents the statistics underlying figure 3 in the main text by sample. The "All States" sample includes respondents in all States. The "Non-UFM States" sample excludes States that had adopted universal free meals (UFM) statewide for the 2022–2023 school year (California, Maine, Massachusetts, Nevada, and Vermont). From top to bottom, each cell presents the sample estimate, the estimated 95-percent confidence interval (in parenthesis), the unweighted sample size (in brackets), and the samples corresponding weighted population estimate (in braces).

Table A6
Within category differences across estimates by Household Pulse Survey week and figure

	Week 39		Week 50		Week 52
	Figure 1	Figure 2	Figure 1	Figure 2	Figure 3
By income-to-poverty ratio					
Income ≤130% of FPL vs.	20.65	-5.27	7.95	3.24	4.04
income ≥130% of FPL vs.	(6.68)	(-1.41)	(1.79)	(0.68)	(0.58)
Illcome >130% and \$165% FPL	[0.000]	[0.163]	[0.078]	[0.498]	[0.566]
Incomo <1200/ of EDI vo	21.24	-12.64	12.23	8.56	-0.31
Income ≤130% of FPL vs.	(5.99)	(-2.49)	(2.41)	(1.41)	(-0.05)
income >185% and ≤225% of FPL	[0.000]	[0.015]	[0.018]	[0.164]	[0.962]
In a comp <1200/ EDI	50.65	3.08	39.74	16.97	21.34
Income ≤130% FPL vs.	(26.52)	(0.93)	(14.58)	(6.92)	(4.77)
income >225% of FPL	[0.000]	[0.356]	[0.000]	[0.000]	[0.000]
January 1000/ and 51050/ of EDI are	0.59	-7.37	4.28	5.31	-4.36
Income >130% and ≤185% of FPL vs.	(0.16)	(-1.32)	(0.74)	(0.80)	(-0.69)
income >185% and ≤225% of FPL	[0.876]	[0.191]	[0.460]	[0.427]	[0.494]
January 1000/ and 51050/ of EDI are	30.00	8.36	31.79	13.72	17.29
Income >130% and ≤185% of FPL vs.	(12.37)	(2.13)	(9.14)	(3.28)	(3.64)
income >225% of FPL	[0.000]	[0.036]	[0.000]	[0.002]	[0.000]
January 1050/ and 20050/ af FDL	29.41	15.73	27.51	8.41	21.65
Income >185% and ≤225% of FPL vs.	(9.20)	(2.84)	(6.46)	(1.52)	(4.15)
income >225% of FPL	[0.000]	[0.006]	[0.000]	[0.132]	[0.000]
By race					
	-23.24	5.64	-11.77	-0.03	-11.08
White vs. Black	(-9.59)	(1.53)	(-4.30)	(-0.01)	(-3.16)
	[0.000]	[0.131]	[0.000]	[0.993]	[0.002]
	-3.90	6.54	-7.34	6.87	-6.56
White vs. Another	(-1.79)	(1.76)	(-2.60)	(2.07)	(-1.63)
	[0.077]	[0.082]	[0.011]	[0.042]	[0.107]
	19.34	0.90	4.44	6.90	4.53
Black vs. Another	(5.98)	(0.20)	(1.17)	(1.81)	(0.91)
	[0.000]	[0.843]	[0.244]	[0.074]	[0.365]
By ethnicity					
	10.78	-3.58	13.01	-3.11	1.73
Hispanic vs. Non-Hispanic	(5.02)	(-0.99)	(5.50)	(-1.21)	(0.41)
	[0.000]	[0.326]	[0.000]	[0.228]	[0.685]

FPL = Federal poverty level. Another = Asian, another race, or a combination of races.

Note: Table presents the statistics for the differences in estimates within categories by Household Pulse Survey (HPS) weeks 39, 50, and 52 by the figure in the main text that they correspond to. From top to bottom, each cell presents the difference in the estimates, the corresponding *t*-statistic (in parenthesis), and the corresponding *p*-value (in brackets).

Table A7 **Differences in estimates across Household Pulse Survey weeks by category and figure** 

	Difference between week 50 estimate and week 39 estimate			
	Figure 1	Figure 2		
Overall	11.36 (10.22) [0.000]	-8.27 (-5.81) [0.000]		
By income-to-poverty ratio				
Less than or equal to 130 percent of FPL	3.87 (1.42) [0.160]	-2.39 (-0.85) [0.398]		
Greater than 130 percent and up to 185 percent of FPL	16.58 (3.72) [0.000]	-10.91 (-1.95) [0.054]		
Greater than 185 percent and up to 225 percent of FPL	12.89 (2.49) [0.015]	-23.59 (-3.45) [0.001]		
Greater than 225 percent of FPL	14.78 (10.64) [0.000]	-16.27 (-5.58) [0.000]		
By race				
White	12.63 (9.63) [0.000]	-9.40 (-4.79) [0.000]		
Black	1.16 (0.37) [0.709]	-3.73 (-0.89) [0.376]		
Another	16.06 (5.15) [0.000]	-9.73 (-2.21) [0.030]		
By ethnicity				
Hispanic	13.14 (4.33) [0.000]	-7.92 (-2.16) [0.034]		
Non-Hispanic	10.91 (8.82) [0.000]	-8.39 (-4.77) [0.000]		

FPL = Federal poverty level. Another = Asian, another race, or a combination of races.

Note: Table presents the statistics for the differences in estimates across Household Pulse Survey weeks 50 and 39 by category and the figure in the main text that they correspond to. From top to bottom, each cell presents the difference in the estimates, the corresponding *t*-statistic (in parenthesis), and the corresponding *p*-value (in brackets).